AMENDMENT TO CLAIMS

In the Claims

Please AMEND claims 1 and 5.

A copy of all pending claims and a status of each claim is provided below.

1. (Currently Amended) A method for manufacturing an integrated circuit comprising a plurality of semiconductor devices including an n-type transistor and a p-type transistor having a polysilicon gate, the method comprising:

depositing oxide fill on the n-type transistor and the p-type transistor and chemical/mechanical polishing the deposited oxide fill such that a gate stack of the n-type transistor and a gate stack of the p-type transistor, the n-type transistor and the p-type transistor each having spacers are surrounded with oxide[[,]];

etching a portion of the polysilicon from [[a]] the gate of the p-type transistor; depositing a low-resistance material on the p-type transistor and the n-type transistor; and

heating the integrated circuit such that the deposited low-resistance material reacts with the polysilicon of the p-type transistor and the polysilicon of the n-type transistor, such that compressive mechanical stresses are formed along a longitudinal direction of a channel of the p-type transistor.

2. (Original) The method of claim 1, further comprising removing a portion of the deposited low resistance material.

- 3. (Original) The method of claim 1, further comprising:
- covering an n-type transistor with a mask prior to performing the step of etching; and

removing the mask after performing the step of etching.

- 4. (Original) The method of claim 3, wherein the mask is a patterned photoresist layer.
- 5. (Currently Amended) The method of claim 1, wherein the step of depositing comprises depositing at least one of Co, Hf[[F]], Mo, Ni, Pd₂, Pt, Ta, Ti, W, and Zr on the p-type transistor and then n-type transistor.
- 6. (Original) The method of claim 2, wherein the step of removing comprises removing a portion of the deposited low-resistance material with a selective etching technique.
- 7. (Original) The method of claim 1, wherein the step of heating comprises heating the integrated circuit to a temperature of about 300°C to about 1000°C.
- 8. (Original) The method of claim 1, wherein the step of depositing a low-resistance material comprises depositing a low-resistance material to a height of approximately 30Å -200 Å.

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- 9. (Original) The method of claim 1, wherein the step of etching a portion of the polysilicon comprises etching about half of the polysilicon from the p-type transistor.
- 10. (Original) The method of claim 1, wherein the step of etching comprises etching the polysilicon from the gate of the p-type transistor such that a n-type polysilicon to p-type polysilicon ratio is about 2:1.
- 11. (Previously Presented) The method of claim 1, wherein the etching comprises etching about 250 to about 750Å of the p-type polysilicon.
- 12. (Original) The method of claim 1, wherein the step of etching comprises etching the polysilicon from the gate of the p-type transistor using a wet etch or a dry etch.
- 13. (Original) The method of claim 1, wherein the step of depositing a low-resistance material comprises depositing a low resistance material on the p-type transistor and the n-type transistor using evaporation, sputtering or chemical vapor deposition techniques.
- 14.-19. (Previously Cancelled).
- 20. (Original) A method for manufacturing an integrated circuit comprising a plurality of semiconductor devices including an n-type transistor and a p-type transistor, the method comprising:

forming a polysilicon layer on the n-type transistor and the p-type transistor, wherein the polysilicon layer on the p-type transistor has a shorter height than the polysilicon layer on the n-type transistor;

depositing a low-resistance material on the p-type transistor and the n-type transistor; and

heating the integrated circuit such that the deposited low-resistance material reacts with the polysilicon of the p-type transistor and the polysilicon of the n-type transistor, such that compressive mechanical stresses are formed along a longitudinal direction of a channel of the p-type transistor.